50	KSRB 7.11 : Providing and fixing in position aluminium windows and ventilators as per approved drawings with sliding shutters using three track window frame of size 92x31.75mm bottom section 1.3mm thick, weight 1.07kg/m; sides and top sections 1.3 mm, thick, weight 0.933 kg/m.shutter frame section comprising top and bottom section of size 40mmx18mm, wall thickness 1.25mm. weight 0.417 kg./m. shutter side outer 40mmx18mm. wall thickness 1.25mm. weight 0.417 kg/m, shutter interlock section 40mmx26.7mm wall thickness 1.1 mm. thick, weight 0.469 kg/m, the shutters mounted on nylon rollers with approved quality of fixtures such as aluminium handles tower bolts etc.; providing and fixing 5.5mm. thick plain glass for shutters fitted with rubber beading all aluminium sections including cutting to required length, joints mitred subdividing the frame tenonned and rivetted, in the assembled frame, stiffened with end clips for corners, angles etc., and fixed to the walls, lintels, floor beams/cills as the case may be, with necessary steel screws, raul plugs or teak wood gatties including cutting masonry or concrete and making good the original surface using cement mortar - using aluminium section powdered coated to a minimum of 60- 70 microns with exterior durable pure polyester grade powder of approved quality.Pg No.33 Item No.7.11.2								
Ward 7 Hospital									
ground floor									
W	Sqm	4	1.50		1.50	9.00			
Ward 8 Hospital									
Ground floor									
W1	Sqm	5	1.50		1.50	11.25			
W2	Sqm	1	1.50		1.80	2.70			
W3	Sqm	3	0.90		1.50	4.05			
V	Sqm	4	0.75		0.60	1.80			
V1	Sqm	1	0.60		0.45	0.27			
Basic Rate							4181.00		
Area weightage 8%							334.48		
Total						29.07	4515.48	131265.00	
Ward 7 Hospital									
First floor									
W	Sqm	8	1.50		1.5	18.00			
V	Sqm	8	0.75		0.6	3.60			
Ward 8 Hospital									
First floor									
W1	Sqm	8	1.50		1.50	18.00			
W2	Sqm	1	1.50		1.80	2.70			
V	Sqm	4	0.75		0.60	1.80			
Basic Rate							4181.00		
An additional rate of Rs.5/sqm per floor may be added for every additional floor							5.00		

sub total							4186.00	
Area weightage 8%							334.88	
Total						44.10	4520.88	199370.81
Ward 7 Hospital								
Second Floor								
W	Sqm	2	1.50		1.50	4.50		
V	Sqm	1	0.75		0.60	0.45		
Basic Rate							4181.00	
An additional rate of Rs.5/sqm per floor may be added for every additional floor							10.00	
sub total							4191.00	
Area weightage 8%							335.28	
Total						4.95	4526.28	22405.09

51 KSRB 7.9 : Providing and fixing M.S.grill work for windows and ventilators weighing 21kg/sqm using M.S. flats, or M.S. square rods, or combination of M.S. flats and square rods as per approve design, drawing including cutting steel sections and welding the same to required pattern with a coat of red lead primer, cost of materials, fixtures, labour and HOM of machinery complete as per specifications.Specification No. KBS 7.12 Pg No.32 Item No.7.9

Ward 7 Hospital								
Ground floor								
W	kgs	4			47.25	189.00		
			21kg per sqm 1.5*1.5*21=47.25					
Ward 8 Hospital								
Ground Floor								
W1	kgs	5			47.25	236.25		
			21kg per sqm 1.5*1.5*21=47.25					
W2	kgs	1			56.70	56.70		
			21kg per sqm 1.5*1.8*21=56.70					
W3	kgs	3			28.35	85.05		
			21kg per sqm 0.9*1.5*21=28.35					
Basic rate							78.00	
Area weightage 8%							6.24	
Total						567.00	84.24	47764.08
Ward 7 Hospital								
First floor								
W	kgs	8			47.25	378.00		

			21kg per sqm 1.5*1.5*21=47.25						
Ward 8 Hospital									
First floor									
W1	kgs	8			47.25	378.00			
			21kg per sqm 1.5*1.5*21=47.25						
W2	kgs	1			56.70	56.70			
			21kg per sqm 1.5*1.8*21=56.70						
Basic rate							78.00		
An additional rate of Rs.5/sqm per floor may be added for every additional floor							5.00		
sub total							83.00		
Area weightage 8%							6.64		
Total						812.70	89.64	72850.43	
Ward 7 Hospital									
Second Floor									
W	kgs	2			47.25	94.50			
			21kg per sqm 1.5*1.5*21=47.25						
Basic rate							78.00		
An additional rate of Rs.5/sqm per floor may be added for every additional floor							10.00		
sub total							88.00		
Area weightage 8%							7.04		
Total						94.50	95.04	8981.28	

52 Providing and fixing Stainless steel staircase raling as per Chief Architect Drawing No. 11520/ HRSC with hand rail 50mm dia 16 guage hollow pipe welded to vertical hollow 50mm dia pipe of 16 guage, stainless steel vertical pipe spaced at 1.20m regular intervals, and 5 Nos of 25mm dia. Stainless steel hollow horizontal pipe are welded to vertical 50mm dia hollow pipe. The entire assembly is fixed to staircase concrete by using expansion bolts by drilling concrete etc., complete including cost of materials, labour, HOM of machineries and electrical charges, etc., complete as per specifications. Pg 43 Item no.7.38

Ward 7 Hospital								
Ground floor								
stair case railing	sqm	1	13.4		0.9	12.06		
Ramp Railing	Sqm	1	47.04		0.9	42.34		
Ward 8 Hospital								
Ground floor								

stair case railing	sqm	1	6.45		0.90	5.81		
Basic rate							6147.00	
Area weightage 8%							491.76	
Total						60.21	6638.76	399719.74
Ward 7 Hospital								
First floor								
stair case railing	sqm	1	13.30		0.90	11.97		
Balcony Railing	Sqm	1	25.99		0.90	23.39		
Ward 8 Hospital								
First floor								
stair case railing	sqm	1	6.45		0.90	5.81		
Basic rate							6147.00	
An additional rate of Rs.5/sqm per floor may be added for every additional floor							5.00	
Sub total							6152.00	
Area weightage 8%							492.16	
Total						41.17	6644.16	273540.07

53 Providing and fixing M.S. Gate as per Chief Architect Drawing,using 50mm x 50mm 14 guage M.S. hollow pipe frame work bent to ornamental shape as shown in the drawing and 35mm x 6mm and 16 x 16mm Square rods for verticals alternatively spaced at 4cms c/c in two halves and 40mmx6mm M.S. flats for horizontal member and at the top cast iron spikes are provided at alternate vertical members as shown in the drawing etc., complete. All the steel surface should be thoroughly cleaned free of rust and painted with anti corrosive paint (shop paint) etc., complete. The work includes cost of all materials, labour charges for all items of work, hire charges for welding, cutting and grinding equipment, and electricity charges, with lead and lift, loading and unloading charges, etc., complete as per specifiocation. Pg no:42.Item no:7.37

Ward 11 Hospital								
Gate	Sqm	2	3		1.8	10.8		
Ward 8 Hospital								
Gate	Sqm	1	3.00		1.80	5.40		
Basic rate							2934.00	
Area weightage 8%							234.72	
Total						16.20	3168.72	51333.26

54 KSRB 15-18.2 : Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as per specifications. Pg no:120.Item no:15.74

Ward 11 Hospital								
For gate	Sqm	2	3		1.8	10.8		
Ward 7 Hospital								
For window and ventilators	sqm	1			window qty+ventilator qty	35.55		

Painting for Grill Works	Sqm		window qty			31.50		
Ward 8 Hospital								
For window and ventilators	sqm	1	window qty+ventilator qty			42.57		
Painting for Grill	Sqm		window qty			38.70		
For gate	Sqm	1	3		1.8	5.40		
Basic rate							82.00	
Area weightage 8%							6.56	
						164.52	88.56	14569.89

55	KSRB 12-6.1 : Providing 20mm square M.S footrest and fixing in manhole with M 10 cement concrete block of 20x20x10cms, using 20mm and down size metal of size including cost of materials, labour charges, curing complete as per specifications. Specification No. KBS 12.4.6Pg No. 73 item no. 11.44								
	Ward 8 Hospital								
	For sump	No.s	4				4.00		
	Basic rate							246.00	
	Area weightage 8%							19.68	
							4.00	265.68	1062.72

56	Pg No 134,Item No17.4 Conveying the excavated earth, debries etc., with all lead and lifts including loading and unloading charges etc., complete as per the direction of the Engineer-in-charge.								
	Ward 11 Hospital								
	EARTH	Cum					3422.03		
	Loading and unloading item no.17.1 KSRRB M 100-1	Cum						68	
	Basic rate for haulage of materials as per item No. 17.4 KSRRB : M 100 - 4.1	t.km	For surface roads exluding loading & unloading Basic rate					2.5	
	Average Weight of	For10Kms =10x1.28x2.5						32.00	
	Basic rate							100.00	
	Area weightage 8%							8.00	
							3422.03	108.00	369579.24

57	Conveying the excavated earth, debries etc., with all lead and lifts including loading and unloading charges etc., complete as per the direction of the Engineer-in-charge. Pg No 133,Item								
	Ward 7 Hospital								
	EARTH	Cum					54.36		
	Ward 8 Hospital								

EARTH	Cum					112.93		
Loading and unloading item no.17.1 KSRRB M 100-1	Cum						68.00	

	Basic rate for haulage of materials as per item No. 17.4 KSRRB :	t.km	For surface roads exluding loading & unloading					2.50	
	Average Weight of	For2Kms =2x1.28x2.5						6.40	
	Basic rate							74.40	
	Area weightage 8%							5.95	
	Total						**167.29**	**80.35**	**13442.09**
	ELECTRICAL								
58	Supplying 6A flush /projected type socket and a 6 amps flush/projected type SP switch either surface mounting in a gang box or in a 4mm thick plastic sheet and fixing over a flush mounted wooden box and wiring using necessary capacity wires as required. (P.6/I.12a) Electrical -SR 2015-16)								
		No	50				50.00	**91.00**	**4550.00**
59	Supplying and flush mounting teak wooden box without front plank, made of not less than 12mm thick wood, after due groove cutting, necessary masonry patch work complete. (P.4/I.6) Electrical -SR 2015-16)								
	b) 12"x12"x3"	Each	30				30.00	98.00	**2940.00**
	c) 10"x7"x3"	Each	30				30.00	68.00	**2040.00**
60	Extra for groove cutting, plastering and colour washing for embedding PVC conduit/GI pipe and plastering finishing the wall upto wall surface complete upto 50mm conduit in brick in wall (P.3/I.7a) Electrical-SR 2015-16)								
		Rmtr	1	200			200.00	14.00	**2800.00**
61	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipments on the meter board using 40mm dia 2.90 mm thick GI pipe 2.5 mtr long buried in a pit…… The pit should be filled with equal proportion of salt and charcoal 150 mm alround the pipe to complete depth. The connection from the pipe to the conduit etc, is to be established through GI wire of size as per IS1 specification 7.3.3 of IS 732 using 12 mm dia bolts, nuts, washers and checknuts etc, the pipe shall have 16 through holes of 122 mm dia. (P.68/I.2) Electrical -SR 2015-16)								
		Each	2				2.00	3000.00	**6000.00**
62	Supplying and fixing of porcelain fuse chanel with cut out on existing wooden/panel using ncessary nuts, bolts and washers etc complete (P.32/I.3a) Electrical -SR 2015-16)								
		Each	12				12.00	54.00	**648.00**
63	Supplying 20mm dia 2mm thick heavy guage PVC conduit pipe with suitable size bends, metal junction boxes, adhesive paste etc and running before concreting the slabs. The conduit should be tied to the reinforcement roads by using binding wire and unused ways of junction boxes and pipe ends should be covered using PVC and enclosures and run with 18 SWG GI fish wire run throughout the conduit wherever necessary. (P.2/I.2a) Electrical -SR 2015-16)								
		Rmtr	1	200			200.00	32.00	**6400.00**
64	Supplying and fixing PBBC brass/Bakelite straight or slant batten holder and wiring, within 60W/230 Volts lamps. (P.13/I.12a) Electrical -SR 2015-16)								
		No.	50				50.00	60.00	**3000.00**

65	Supply patty type fluorescent tube light fitting of 4 feet 40 watts fluorescent tube of 230 volts made of M.S. sheet and stove enameled with heavy duty polyfill aluminum choke, starter, locking type brass contact holders mounted on foldable type sheet base fully wired.for use on 230 volts AC supply including 1 Nos 4'-36/40 watts fluorecent tube A Group (P.16/I.2a) Electrical -SR 2015-16)								
		No	30				30.00	400.00	**12000.00**
66	Wiring for lighting / power circute using one of PVC insulated 1100v/grade multies and copper conductor single core cable in open or consealed system of wiring A Group materials 1.50 Sqmm materials (P.9/I.20Ib) Electrical -SR 2015-16)								
		Rmtr	2	500			1000.00	15.00	**15000.00**
67	Supplying and running of GI / Copper conductor for grounding & (along with other wires of CTS or conduit system of wiring) using if necessary suitable size clamps bolts nuts and washers etc. (P.68/I.3Ic) Electrical -SR 2015-16)								
		Rmtr	8	6.00			48.00	221.00	**10608.00**
68	Supplying and fixing miniature circuit breakers/Isolators on existing MCB distribution boards using necessary fixing materials and wiring complete as required (P.36/I.12Ba) Electrical -SR 2015-16)								
		No.	10				10.00	370.00	**3700.00**
69	Supplying capacitor type ceiling fan complete with down rod blades, shakle, regulator canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374-1979 and with double ball bearing system and as per technical data approved (Almanord, Unique ISI, Anchor, Crompton, Khaitan, Bajaj, Usha, Johnson make) (P.23/I.23IIa) Electrical -SR 2015-16)								
		Nos	25				25.00	1900.00	**47500.00**
70	Fixing a ceiling fan of all capacities and all types to the existing S hook with fan regulator to the existing board together with supplying and fixing a 5 ampers ceiling rose, necessary length of 23/0.0076 inch PVC insulated twin twisted copper wire and wiring completely. (P.29/I.8) Electrical -SR 2015-16)								
		Nos	25				25.00	105.00	**2625.00**
71	Digging of trench of 0.6m deep x 0.50mtr wide refiling the trench to the required ground level and consolidating etc., complete. In Hard Soil (P.70/I.6b) Electrical -SR 2015-16)								
		Rmtr	1	200			200.00	50.00	**10000.00**
PLUMBING									
72	KSRB 12-8.3 : Constructing brick masonry inspection chamber 600x850mm, and 450mm depth, (clear inside dimension) for pipeline with three or more inlets, using table moulded non-modular bricks of class designation 50 in cement mortar 1:5, C.I cover with frame (light duty) 455x610mm internal dimensions, total weight of cover with frame to be not less than 38 kg (weight of cover 23kg and weight of frame 15 kg) R.C.C. top slab with cement concrete M 15 with 20mm and downsize granite metal , foundation concrete M 5 with 40mm and downsize granite metal inside plastering 12mm thick with cement mortar 1:3, finished smooth with a floating coat of cement on walls and bed concrete complete as per standard design including cost of materials, labour charges, curing complete as per specifications. Specification No. KBS Pg No 74,Item No 11.54								
INSPECTION CHAMBER									
	Nos	12				12.00			
Basic rate							8817.00		
Area weightage 8%							705.36		

							12.00	9522.36	114268.32
73	KSRB 2-2-4 : Excavation by manual means for foundation of buildings, water supply & sanitary lines and electrical conduits etc., either in pits or in trenches 1.50m and above in width, soft rock without blasting not exceeding 1.50mts in depth including stacking the excavated stuff clear from edges of excavation with lead upto 50m labour, HOM of equipment complete as per specifications. -specification No. KBS 2.1C/2.9.4/2.18/2.19 Pg no:81.Item no12.28								
	Trenches								
		Cum	1	34.00	0.60	1.00	20.40		
		Cum	1	30.00	0.60	1.00	18.00		
	Basic rate							883.00	
	Area weightage 8%							70.64	
	Total						38.40	953.64	36619.78
74	Providing and fixing to wall, ceiling and floor unplasticised PVC pipes 10.00 kgf/sq.cm working pressure chemp plast / Wavin or equivalent make with pipe fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. 11.56.2 -do- with 110mm outer dia Pg No 75,Item No 11.56								
	4" PIPES								
	Ward 7 Hospital	m	1	40.00			40.00		
	Ward 8 Hospital	m	1	40.00			40.00		
	Basic rate							688.00	
	Area weightage 8%							55.04	
	Total						80.00	743.04	59443.20
75	Providing and fixing to wall, ceiling and floor unplasticised PVC pipes 10.00 kgf/sq.cm working pressure chemp plast / Wavin or equivalent make with pipe fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications. 11.56.4 -do- with 160mm outer dia Pg No 75,Item No 11.56								
	6" PIPES								
	Ward 7 Hospital	m	1	60.00			60.00		
	Ward 8 Hospital	m	1	60.00			60.00		
	Basic rate							1450.00	
	Area weightage 8%							116.00	
	Total						120.00	1566.00	187920.00
76	KSRB 13-10.3 : Providing and fixing to wall, ceiling and floor unplasticised PVC pipes 10.00 kgf/sq.cm working pressure 25mm outside diameter chemp plast / Wavin or equivalent make with pipe fittings, wall clips, making good the wall, ceiling and floor, including cost of all materials, labour charges, HOM of equipments and testing complete as per specifications.Pg No 94,Item No 13.74								
	25mm PIPES								
	Ward 7 Hospital	m	1	50.0			50.00		
	Ward 8 Hospital	m	1	50.0			50.00		
	Basic rate							109.00	
	Area weightage 8%							8.72	

	Total						100.00	117.72	11772.00
77	Providing stoneware gully trap of approved quality and make fixing in M-15 and plastering with CM 1:3 wherever necessary.(Rate includes cost of all materials, fixtures and lead). 12.112.1 -do-10cms x 10cms Pg No 88,Item No 12.112.1								
	GULLY TRAP								
		Nos	14				14.00		
	Basic rate							185.00	
	Area weightage 8%							14.8	
	Total						14.00	199.8	2797.20
78	Supplying water storage tanks made of virgin polymer (LLDPE) with two layers outer Black or Blue and inner White layer of approved quality and make, conforming to I.S.I./ISO/SSI specifications.Pg No. 258 Item No. 37.58								
	Water tank	Ltr	2	2000			4000		
	Basic Rate							6.00	
	Area weightage 8%							0.48	
	Total						4000	6.48	25920.00
79	KSRB 13-6.3-3Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) 25mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Pg no:91.Item no13.34								
	Gate valve	nos	4				4.00		
	Basic Rate							600.00	
	Area weightage 8%							48.00	
	Total						4.00	648.00	2592.00
80	KSRB13-6.4-2 : Providing and fixing in position brass ball valve high or low pressure with plastic float of approved quality 25mm dia nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No.KBSPg No.92 Item no.13.42								
	Ball valve	Each	4				4.00		
	Basic Rate							606.00	
	Area weightage 8%							48.48	
	Total						4.00	654.48	2617.92
81	Providing and fixing in position brass bib cock of approved quality 25mm nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Pg no:91.Item no13.25								
	Bib cock	Each	30				30.00		
	Basic rate							272.00	
	Area weightage 8%							21.76	
	Total						30.00	293.76	8812.80

82	KSRB 11-6 : Providing and fixing white vitreous china clay, water closet European type (Pedestal type, S-trap) with black solid plastic seat and lid, C.P brass hinges, rubber buffers. 10 litre white glazed vitreous china clay low level, flushing cistern (all are approved make) with fittings, C.I / M.S brackets, 40mm diameter flush bend with fittings and clamps, overflow arrangements with specials and 25mm mosquito proof coupling of approved design, painting of fittings and brackets, cutting and making good the wall and floor wherever required, including cost of materials ,labour complete as per specifications.specification No. KBS 11 Pg no.77 Item No.12.6								
	Toilet								
	European type WC	Each	18				18.00		
	Basic rate							4955.00	
	Area weightage 8%							396.40	
	Total						**18.00**	**5351.40**	**96325.20**
83	KSRB 11-11.6 : Providing and fixing white vitreous china clay, angle back wash basin size 600x480mm with a single 15mm C.P brass pillar tap with C.I / M.S brackets, 32 mm C.P. brass waste of standard pattern, painting of fittings and brackets, cutting and making good the wall and floor wherever required, including cost of materials, labour complete as per specifications . Pg no:81.Item no12.28								
	Wash basin								
		Unit	25				25.00		
	Basic rate							3133.00	
	Area weightage 8%							250.64	
	Total						**25.00**	**3383.64**	**84591.00**
84	Providing and fixing C.P. brass towel rail 600 mm length, 20mm dia with C.P brackets, fixed to wooden cleats with C.P. brass screws including cost of materials, labour complete as per specifications, Pg no:83.Item no12.46								
	Towel rail								
		nos	5				5.00		
	Basic rate							710.00	
	Area weightage 8%							56.80	
	Total						**5.00**	**766.80**	**3834.00**
85	KSRB 11-15.5 : Providing and fixing 1500x450mm dia rectangular shape mirror with plastic moulded frame of approved make and shade with 6mm thick hard board backing including cost of materials, labour complete as per specifications Pg no:83.Item no12.43								
	Toilet								
		Units	10				10.00		
	Basic rate							1698.00	
	Area weightage 8%							135.84	
	Total						**10.00**	**1833.84**	**18338.40**

86	KSRB13-5 : Providing and fixing water meter with stop cock, jam nut, socket in G.I pipe line including cutting and threading the pipe and making long screws including cost of all materials, labour, HOM of equipments and testing complete as per specifications. Specification No.KBS 13.2.19 / 13.16 Pg no:91.Item no13.22								
	Water Meter	Set	2				1		
	Basic Rate							1318.00	
	Area weightage 8%							105.44	
	Total						1.00	1423.44	1423.44
								TOTAL AMOUNT	18408551

CERTIFICATE:

1) The work spot has been inspected and found to be necessary
2) The work spot comes under B.B.M.P
3) The provisions made in the estimate are necessary and minimum
4) The estimate is based on C.S.R of 2016-2017, C.S.R. of 2015-16 and approved rates.

Assistant Engineer
Yelahanka Project
BBMP

Assistant Executive Engineer
Yelahanka Project
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Executive Engineer.
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